

What is claimed is:

1. A system for processing returned postal mail using barcode application technology, the system receiving addresses of respective recipients, to whom a large number of mailpieces are to be forwarded in response to a sender's request, and  
5 mail information; printing a zip code number barcode and an information collection barcode on predetermined positions, respectively, on an envelope using a barcode printer included in a mail agent company; requesting a mail center to deliver a large number of mailpieces; making returned mail information regarding each returned mailpiece received from the mail center into a database; reports the returned mail  
10 information to the sender through a communication network; and reporting a recipient that a mailpiece having been forwarded to the recipient is returned through the communication network, the system comprising:

a barcode reader which reads a particular barcode on each returned mailpiece received from the mail center;

15 a data input unit which generates and outputs a key signal ordering a particular operation to be executed or receives and transmits particular data;

a mail processing server connected to the communication network, the barcode printer, the barcode reader, and the data input unit, the mail processing server transmitting data to and receiving data from the communication network,  
20 arithmetically processing the mail information obtained by the barcode reader and various types of data received from the data input unit, manages the mail information and the data to be made into a database, and controlling elements of the system to perform predetermined operations;

a forwarded mail information database connected to the mail processing  
25 server, the forwarded mail information database making forwarded mail information received from the mail processing server into a database, and extracting and outputting data in response to a request from the mail processing server; and

a returned mail information database connected to the mail processing server,  
the returned mail information database making returned mail information received  
30 from the mail processing server into a database, and extracting and outputting data in response to a request from the mail processing server.

2. The system of claim 1, wherein the mail processing server comprises:

a barcode processor connected to the barcode reader, the barcode processor sequentially transmitting the mail information obtained by the barcode reader along a predetermined path;

an information processor connected to the data input unit and the barcode processor, the information processor arithmetically processing the mail information received from the barcode processor and the various types of data received from the data input unit, managing the mail information and the data to be made into a database, and manages particular data to be transmitted to or received from the communication network; and

a communication interface unit connected to the communication network and the information processor, the communication interface unit controlling an operation timing and a format of the particular data so that the particular data can be transmitted and received between the information processor and the communication network according to a predetermined communication protocol.

3. The system of claim 1, wherein the information collection barcode comprises the mail information, is a one-dimensional barcode or a two-dimensional barcode, and is printed on a predetermined position on the envelope.

4. The system of claim 3, wherein the information collection barcode comprises a classification field for distinguishing a sender requesting forwarding of a large amount of mail by category, a company name field indicating the sender, a job name field for distinguishing mail content by type of job, an agent company name field indicating an agent company requested to forward the large amount of mail, a customer ID field indicating an ID of a customer who is managed by the sender and is supposed to receive the relevant mailpiece, an e-mail address field indicating the customer's e-mail address, and an "others" field containing other information.

5. The system of claim 1, wherein the information collection barcode comprises a classification field for distinguishing a sender requesting forwarding of a large amount of mail by category, a company name field indicating the sender, a job name field for distinguishing mail content by type of job, an agent company name field indicating an agent company requested to forward the large amount of mail, a customer ID field indicating an ID of a customer who is managed by the sender and

is supposed to receive the relevant mailpiece, an e-mail address field indicating the customer's e-mail address, and an "others" field containing other information.

6. The system of claim 1, wherein the forwarded mail information  
5 comprising a recipient's address and the mail information, and the returned mail information comprises a reason for return of each mailpiece and the mail information.

7. The system of claim 1, wherein the mail processing server reports a  
10 result of processing the returned mailpieces to the sender through the communication network, extracts recipient information from the returned mail information, and reports the recipient that a mailpiece having been forwarded to the recipient is returned through the communication network.

8. A method of processing returned postal mail using barcode application  
15 technology, the method in which addresses of respective recipients, to whom a large number of mailpieces are to be forwarded in response to a sender's request, and mail information are received; a zip code number barcode and an information collection barcode are printed on predetermined positions, respectively, on an envelope using a barcode printer included in a mail agent company; a mail center is  
20 requested to deliver a large number of mailpieces; returned mail information regarding each returned mailpiece received from the mail center is made into a database; the returned mail information is reported to the sender through a communication network; and a recipient is reported through the communication network that a mailpiece having been forwarded to the recipient is returned, the  
25 method comprising:

receiving forwarded mail information from the sender and making the forwarded mail information into a database;

extracting a recipient's address and corresponding mail information from the forwarded mail information, printing a zip code number barcode and an information  
30 collection barcode on predetermined positions, respectively, on an envelope, and reporting mail shipment to the sender;

receiving returned mailpieces, sorting the returned mailpieces by reason for return, and recording a reason for return of each returned mailpiece;

reading the information collection barcode printed on each returned mailpiece and making returned mail information into a database; and

reporting a result of processing the returned mailpieces to the sender through the communication network, extracting recipient information from the returned mail information, and reporting a corresponding recipient through the communication network that a mailpiece having been forwarded to the recipient is returned.

9. The method of claim 8, the information collection barcode comprises the mail information, is a one-dimensional barcode or a two-dimensional barcode, and is printed on a predetermined position on the envelope.

10. The method of claim 9, wherein the information collection barcode comprises a classification field for distinguishing a sender requesting forwarding of a large amount of mail by category, a company name field indicating the sender, a job name field for distinguishing mail content by type of job, an agent company name field indicating an agent company requested to forward the large amount of mail, a customer ID field indicating an ID of a customer who is managed by the sender and is supposed to receive the relevant mailpiece, an e-mail address field indicating the customer's e-mail address, and an "others" field containing other information.

11. The method of claim 8, wherein the information collection barcode comprises a classification field for distinguishing a sender requesting forwarding of a large amount of mail by category, a company name field indicating the sender, a job name field for distinguishing mail content by type of job, an agent company name field indicating an agent company requested to forward the large amount of mail, a customer ID field indicating an ID of a customer who is managed by the sender and is supposed to receive the relevant mailpiece, an e-mail address field indicating the customer's e-mail address, and an "others" field containing other information.

12. The method of claim 8, wherein the forwarded mail information comprising a recipient's address and the mail information, and the returned mail information comprises a reason for return of each mailpiece and the mail information.